

MSAD 75 Teaching and Learning Framework

Science: Kindergarten Power Standards

Power Standards are a subset of the complete list of standards for each grade and for each subject. They represent the “safety net” of standards every teacher ensures all students have the opportunity to learn.

MLR A-C: The Process Skills of Science

The Science and Technology Standards outline the essential understandings of these disciplines. Standard A describes four themes that serve as a broad scaffold for understanding and organizing student understanding of the content and processes of science and technology. Standard B describes the processes of scientific inquiry and technological design. As a complement to the expectations of inquiry and design outlined in Standard B, Standard C describes the enterprises of science and technology and the connection to society. Standards D and E have what students are expected to do that encompass the subject matter conventionally referred to as life, physical, and earth and space science. It is essential that classroom instruction integrate the processes and ideas of Standards A, B, and C with the knowledge of Standards D and E, rather than teach them separately. Instruction should support students in asking questions and making inquiries to help them, understand and solve problems that require the integration of knowledge and processes in authentic contexts.

MLR D: The Physical Setting

Students understand the universal nature of matter, energy, force, and motion and identify how these relationships are exhibited in Earth Systems, in the solar system, and throughout the universe.

Kindergarten Standards

What students are expected to do

Big Ideas: D2 Earth

Core Content: Students describe Earth’s weather and surface materials and the different ways they change.

- Explain that the sun warms the air, water, and land.
- Describe the way in which weather changes over months.
- Describe what happens to water left in an open container as compared to water left in a closed container.

Big Ideas: D3 Energy and Matter

Core Content: Students use observable characteristics to describe objects and materials and changes to physical properties of materials.

- Describe objects in terms of what they are made of and their physical properties.